BUFFALO 35011181 ver.01 1-01 C10-015

WS-QL Series

TeraStation WS

User Manual

Contents

Chapter 1 Opening Windows Storage Server 3

Opening Windows Storage Server.....3

Chapter 2 Windows Update 4

Windows Update.....4

Chapter 3 Buffalo Tool 6

Buffalo Tool 6
Mail Notification Setting.....7
Create Share Folders.....7
RAID Builder.....7
I'm here.....8
LCD Display Setting.....8
Local user and Group (Local).....8
Buffalo Support Site.....8

Chapter 4 Creating Volumes 9

RAID Modes 9
Deleting Volumes 10
Creating a RAID 5 Volume.....11
Creating a Mirrored Volume.....12
Creating a Striped Volume 13
Spanned Volume 14
Creating a Simple Volume 15

Chapter 5 Various Settings 17

Time Settings.....17
Changing the Name of the Server, Workgroup, or Domain 18
Changing the Administrator Password 19
Adding a User.....21
Adding a Group.....22
Formatting Volumes 24
Creating Shared Folders.....25
Mail Notification Setting 27
Changing the IP Address.....29

Chapter 6NAS Navigator2..... 30

Available Menus 30

Appendix 34

Factory Settings.....34
Liquid Crystal Display 35

Chapter 1
Opening Windows Storage Server

Opening Windows Storage Server

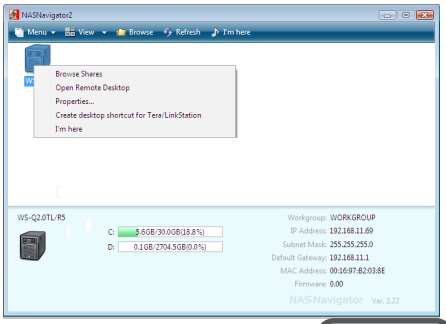
To open Windows Storage Server, follow the following procedure.

Note: If you are using an OS X Mac, download and install **Remote Desktop Connection Client for Mac** from Microsoft before continuing. Use version 1.0.3 if using OS X 10.3.9, or the latest version if you are using a more recent version of OS- X.

1 For a PC, double-click [NAS Navigator2] on your desktop.

For a Mac, click [NAS Navigator2] in the Dock.

2



Right click the TeraStation icon (In Mac OS, click by pressing the control key) and select [Open Remote Desktop] from the menu.

Note:
If multiple LinkStations and TeraStations are connected to the network, an icon will be displayed for each. If you're not sure which icon is for your TeraStation, check the IP address. You can get your TeraStation's IP address from the LCD screen on its front panel.

3

Enter the user name and the password and click [OK].

By default, the user name and password are as follows.

User name: **Administrator**

Password: **password**

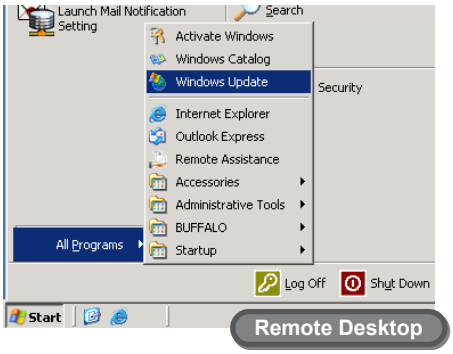
4 Windows Storage Server now opens in remote desktop.

Chapter 2
Windows Update

Windows Update

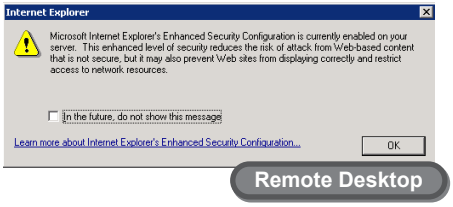
For best results, use Windows Update to keep Windows up to date. Connect the TeraStation to the Internet before running Windows Update.

1



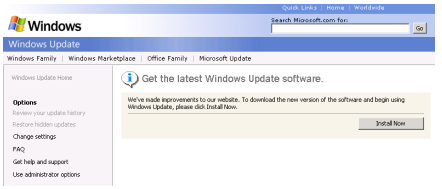
Click [Start]-[All Programs]-[Windows Update].

2


Internet Explorer
Microsoft Internet Explorer's Enhanced Security Configuration is currently enabled on your server. This enhanced level of security reduces the risk of attack from Web-based content that is not secure, but it may also prevent Web sites from displaying correctly and restrict access to network resources.
In the future, do not show this message
Learn more about Internet Explorer's Enhanced Security Configuration...
OK
Remote Desktop

Click [OK].

3

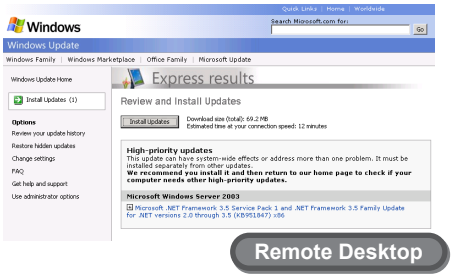


Click [Install Now].

4

Windows Update will open. Click [Express].

5



Click [Install Updates].

Follow the instructions on the screen.

Windows is now updated.

Please install antivirus software and keep it up-to-date.

Chapter 3
Buffalo Tool

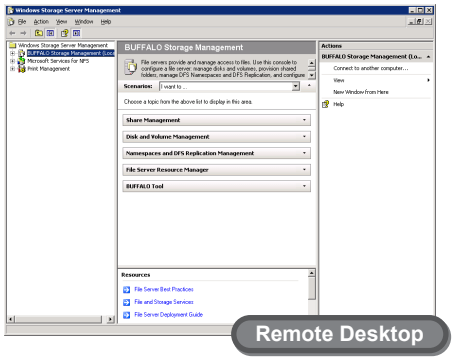
Buffalo Tool

To open Buffalo tool, proceed as follows.

1

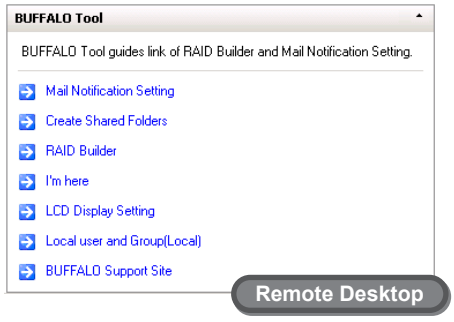
Double-click on the Nas.msc icon on the remote desktop, or click [Start]-[Administrative Tools]-[Windows Storage Server Management].

2



Double-click on Buffalo Tool.

3

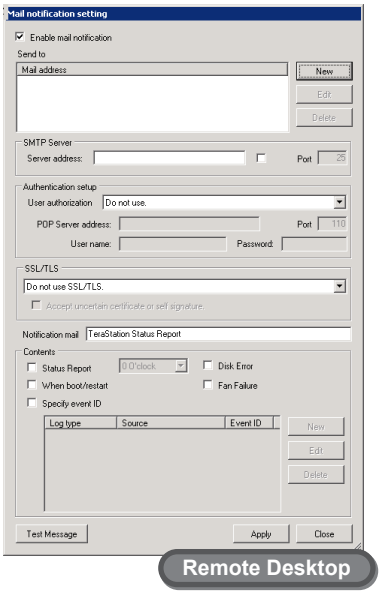


The following tools are available:

- •Mail Notification Setting
- •Create Shared Folders
- •RAID Builder
- •I'm here
- •LCD Display Setting
- •Local user and Group (Local)
- •Buffalo support site

Buffalo Tool is now open.

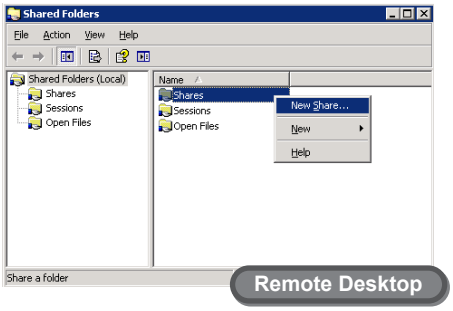
Mail Notification Setting



You may configure the TeraStation to send you status reports and error messages.

Please refer to P27 for details.

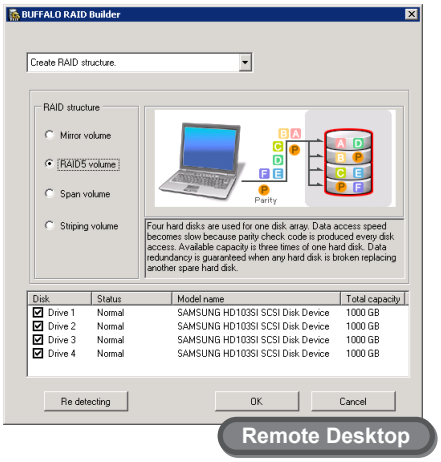
Create Share Folders



Use Share Creator to make new shared folders.

Please refer to P25 for details.

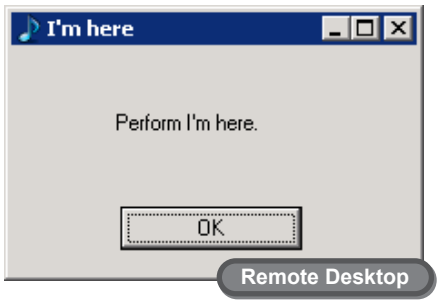
RAID Builder


BUFFALO RAID Builder
Create RAID structure.
RAID structure
Mirror volume
RAID5 volume
Span volume
Striping volume
Parity
Four hard disks are used for one disk array. Data access speed becomes slow because parity check code is produced every disk access. Available capacity is three times of one hard disk. Data redundancy is guaranteed when any hard disk is broken replacing another spare hard disk.
Disk
Status
Model name
Total capacity
Drive 1 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 2 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 3 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 4 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Re detecting
OK
Cancel
Remote Desktop

Use RAID Builder to change your RAID configuration.

Please refer to P9 for details.

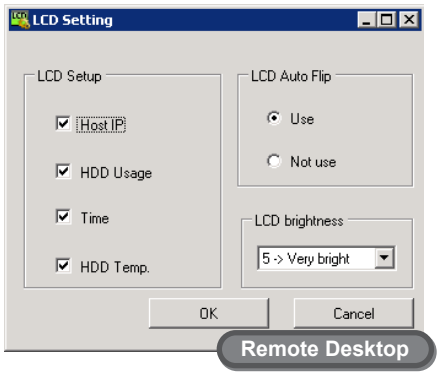
I’m here



Clicking [OK] causes the TeraStation to beep. This can be useful when managing multiple TeraStations.

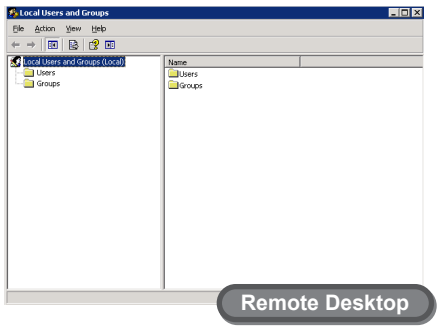
LCD Display Setting

Configure settings for the TeraStation's front LCD display. The following settings are available:



LCD Setup	Select the item to be displayed on the LCD on the front side of TeraStation from [Host IP], [HDD Usage], [Time], [HDD Temp.]
LCD Auto Flip	Displays whether or not to switch the items to be displayed on the LCD on the front side of TeraStation at regular intervals.
LCD brightness	Adjusts the brightness of back light of the liquid crystal display in 5 steps.
OK	Applies the set details.
Cancel	Cancels the set details and closes the screen.

Local user and Group (Local)



To add a new user, click on [Users] and select [New User]. To add a new group, click on [Groups] and select [New Group].

Buffalo Support Site

This link takes you to Buffalo Technology's website.

Chapter 4
Creating Volumes

RAID Modes

By default, the drives on your TeraStation are configured with Windows installed on a 30 GB partition mirrored across drives 1 and 2, 30 GB of unallocated space on drives 3 and 4, and a RAID 5 partition across the remaining space on all four drives. You may reconfigure the drives with other types of volumes.

Changing the type of volumes on your drives requires deleting one or more volumes and creating new volumes. All data on the deleted volumes is lost. Back up all important data before changing RAID modes.

After changing the type of volumes on your drives, it may take several hours to build the new volume. During this time, all other operations on the TeraStation will be slower than usual.

Several types of volumes are supported. A description of each is available below.

RAID 5

Combines identical amounts of space from 4 drives into one array. Parity information for correcting errors is stored, so access speeds are slower than other RAID modes. Total usable space is the 3 times the space from each drive. If a drive fails, you can recover data on the volume by replacing the damaged drive. You cannot recover data if 2 or more drives are damaged.

Mirrored (RAID 1)

Mirrored volumes combine identical blocks of space from 2 drives into one array. The same data is written simultaneously to both drives. If a drive fails, you can recover data on the volume by replacing the damaged drive. You cannot recover data if both drives are damaged.

Striped (RAID 0)

Striped volumes combine identical blocks of space from several drives into one large volume. The full capacity of all blocks of space is available for use. Striped volumes are fast and efficient, but include no parity or redundancy. If any drive is damaged, all data in the volume is lost.

Spanned

Spanned volumes combine unallocated areas from multiple drives into one large volume. Spanned volumes use space efficiently, but include no parity or redundancy. If any drive is damaged, all data in the volume is lost.

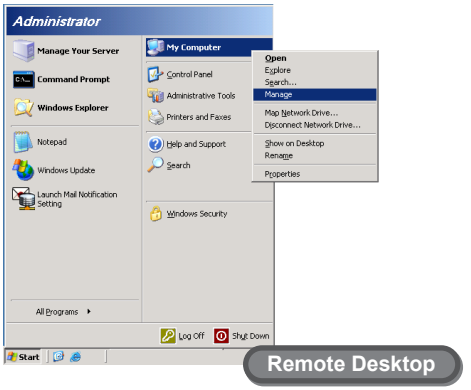
Simple

Simple volumes do not use space from multiple drives. Each volume is located on a single drive. If a drive is damaged, all data on that drive is lost.

Deleting Volumes

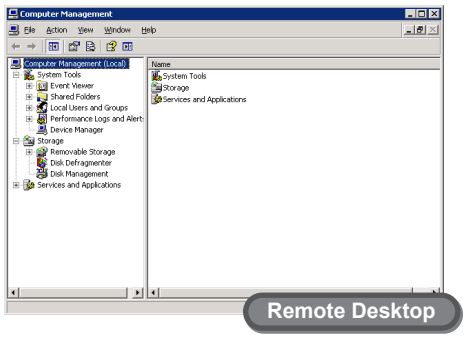
To create a new volume, you'll need unallocated space on the drives. Delete existing volumes to create unallocated space.

1



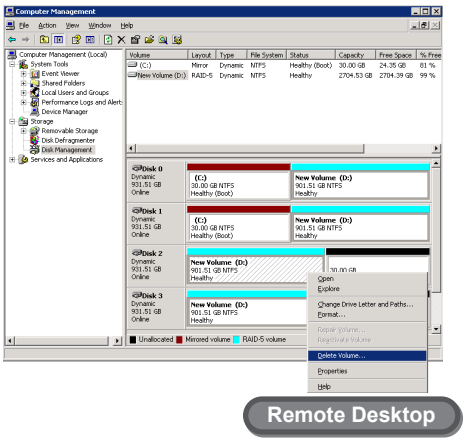
Right-click on [My Computer] and select [Manage].

2



Click on [Disk Management].

3



Right-click on the volume that is to be deleted and select [Delete volume].

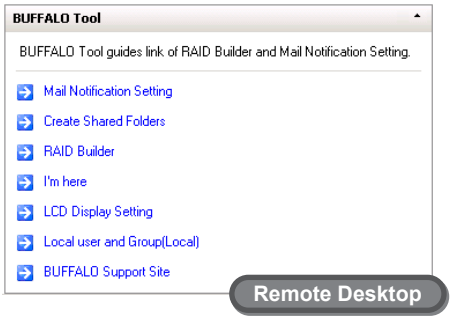
4

Step through the wizard to delete the volume.

The volume is now deleted.

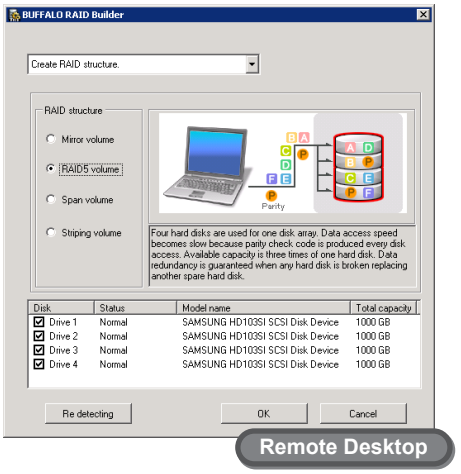
Creating a RAID 5 Volume

1



In the Buffalo Tool, click on [RAID Builder].

2


BUFFALO RAID Builder
Create RAID structure.
RAID structure
Mirror volume
RAID5 volume
Span volume
Striping volume
Four hard disks are used for one disk array. Data access speed becomes slow because parity check code is produced every disk access. Available capacity is three times of one hard disk. Data redundancy is guaranteed when any hard disk is broken replacing another spare hard disk.
Disk
Status
Model name
Total capacity
Drive 1 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 2 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 3 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 4 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Re detecting
OK
Cancel
Remote Desktop

1 Select [Create RAID structure].

2 Select [RAID 5 volume] from [RAID structure]

3 Select all four drives

4 Click [OK]

Note:

It will take about five hours per TB to resync the RAID. During this period, operations on the TeraStation will be slower than usual.

Usable space on the RAID 5 array will be 3/4 of 4 times the smallest unallocated space on a disk.

Example: Disk 1: 50 GB free space, Disk 2: 80 GB free space, Disk 3: 58 GB free space, Disk 4: 80GB free space

The usable space on the RAID 5 volume will be (50 GB X 4) X 3/4 = 150GB.

Your RAID 5 volume is complete.

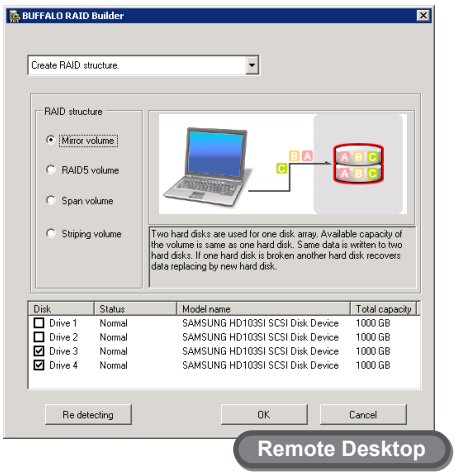
Next, create a shared folder on the volume on P25.

Creating a Mirrored Volume

1

In the Buffalo Tool, click [RAID Builder].

2


BUFFALO RAID Builder
Create RAID structure.
RAID structure
Mirror volume
RAID5 volume
Span volume
Striping volume
Two hard disks are used for one disk array. Available capacity of the volume is same as one hard disk. Same data is written to two hard disks. If one hard disk is broken another hard disk recovers data replacing by new hard disk.
Disk
Status
Model name
Total capacity
Drive 1 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 2 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 3 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 4 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Re detecting
OK
Cancel
Remote Desktop

1 Select [Create RAID structure].
2 In [RAID structure], select [Mirror volume].
3 Select any two of drives 1, 2, 3 and 4.
4 Click [OK].

Note:

It will take about five hours per TB to resync the RAID. During this period, operations on the TeraStation will be slower than usual.

Usable space on the mirrored array will be the same as the smaller of the two unallocated spaces.

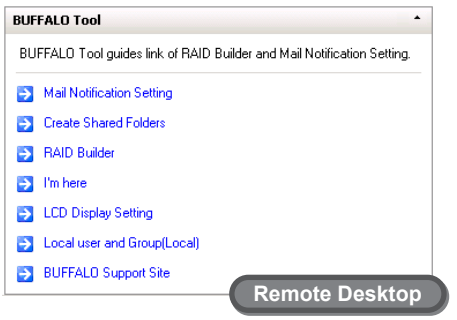
Example: Disk 3: 58 GB free space, Disk 4: 100 GB free space

The usable space on the mirrored volume will be 58 GB.

Your mirrored volume is now configured. Turn to P25 to create a shared folder on the mirrored volume.

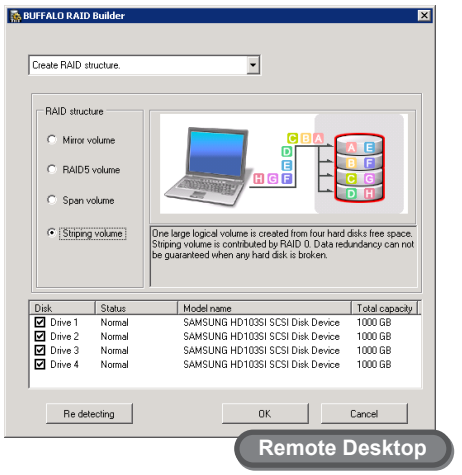
Creating a Striped Volume

1



In the Buffalo Tool, click on [RAID Builder].

2


BUFFALO RAID Builder
Create RAID structure.
RAID structure
Mirror volume
RAID5 volume
Span volume
Striping volume
One large logical volume is created from four hard disks free space. Striping volume is contributed by RAID 0. Data redundancy can not be guaranteed when any hard disk is broken.
Disk
Status
Model name
Total capacity
Drive 1 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 2 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 3 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 4 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Re detecting
OK
Cancel
Remote Desktop

1 Select [Create RAID structure].

2 Select [Striping volume] from [RAID structure].

3 Click all four check-boxes for drives 1, 2, 3 and 4.

4 Click [OK].

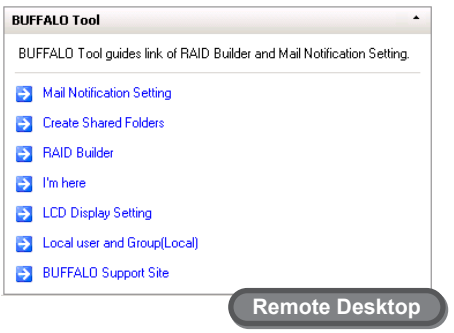
Usable space on the striped volume will be 4 times the smallest unallocated area.

Example: Disk 1: 50 GB free space, Disk 2: 80 GB free space, Disk 3: 58 GB free space, Disk4: 100 GB free space. The usable space on the striped volume will be 50 GB X 4 = 200 GB.

Your striped volume is complete. Turn to P25 to create a shared folder on the striped volume.

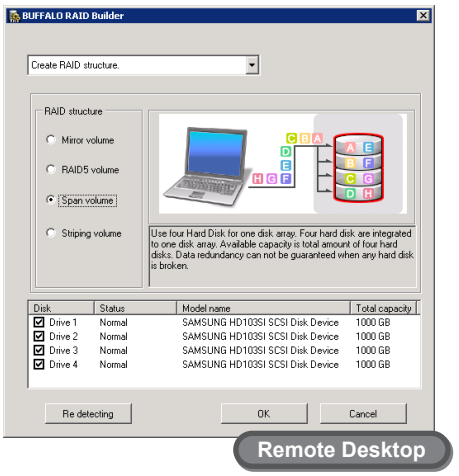
Spanned Volume

1



In the Buffalo Tool, click on [RAID Builder].

2


BUFFALO RAID Builder
Create RAID structure.
RAID structure
Mirror volume
RAID5 volume
Span volume
Striping volume
Use four Hard Disk for one disk array. Four hard disk are integrated to one disk array. Available capacity is total amount of four hard disks. Data redundancy can not be guaranteed when any hard disk is broken.
Disk
Status
Model name
Total capacity
Drive 1 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 2 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 3 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Drive 4 Normal SAMSUNG HD103SI SCSI Disk Device 1000 GB
Re detecting
OK
Cancel
Remote Desktop

1 Select [Create RAID structure].

2 Select [Spanned Volume] from [RAID structure].

3 Click all four checkboxes for drives 1, 2, 3, and 4.

4 Click [OK].

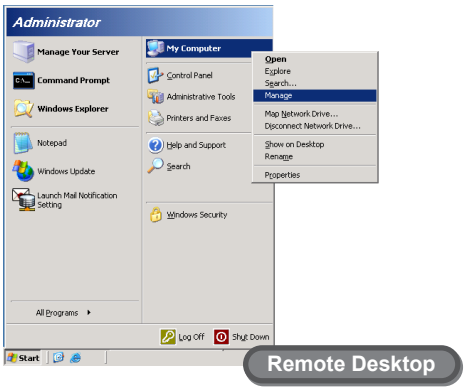
The available space is the total of each unallocated area from the 4 drives.

Example: Disk 1: 50 GB free space, Disk 2: 80 GB free space, Disk 3: 58 GB free space, Disk 4 : 100 GB free space.
The usable space on the spanned volume will be 50 GB + 80 GB + 58 GB + 100 GB = 288 GB.

Your spanned volume is complete. Turn to P25 to create a shared folder on the spanned volume.

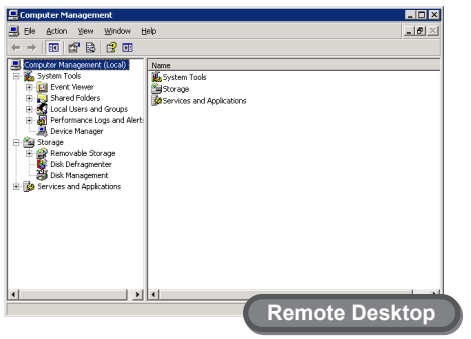
Creating a Simple Volume

1



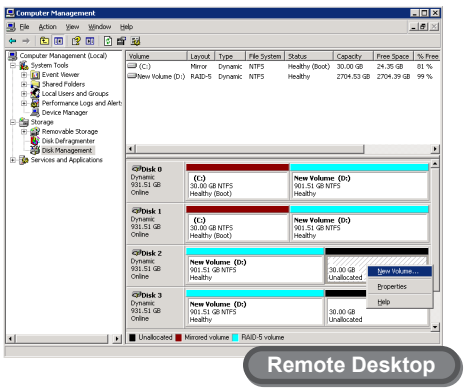
Right click on [My computer] and select [Manage].

2



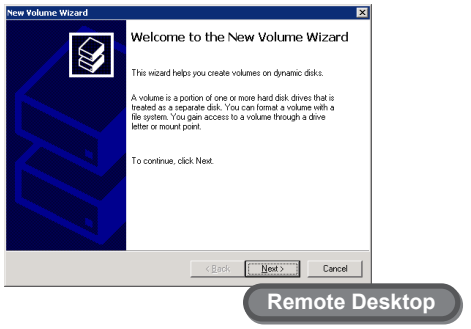
Click [Disk Management].

3



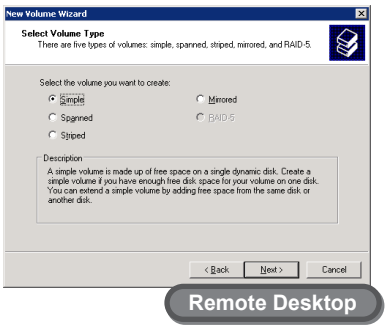
Right click on an unallocated area and select [New Volume].

4


New Volume Wizard
Welcome to the New Volume Wizard
This wizard helps you create volumes on dynamic disks.
A volume is a portion of one or more hard disk drives that is treated as a separate disk. You can format a volume with a file system. You gain access to a volume through a drive letter or mount point.
To continue, click Next.
< Back
Next >
Cancel
Remote Desktop

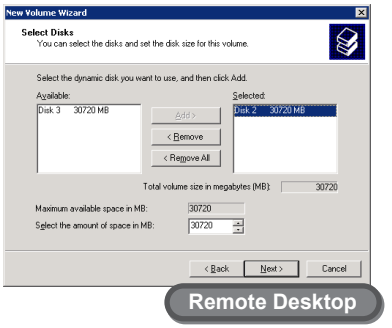
Click [Next].

5


New Volume Wizard
Select Volume Type
There are five types of volumes: simple, spanned, striped, mirrored, and RAID-5.
Select the volume you want to create:
Simple
Mirrored
Spanned
RAID-5
Striped
Description
A simple volume is made up of free space on a single dynamic disk. Create a simple volume if you have enough free disk space for your volume on one disk. You can extend a simple volume by adding free space from the same disk or another disk.
< Back
Next >
Cancel
Remote Desktop

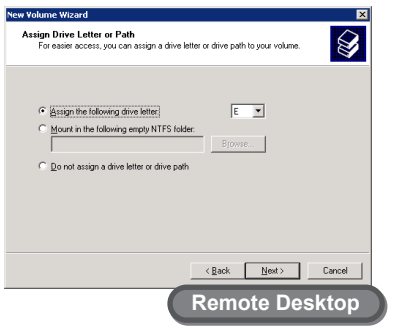
Select [Simple] and click on [Next].

6



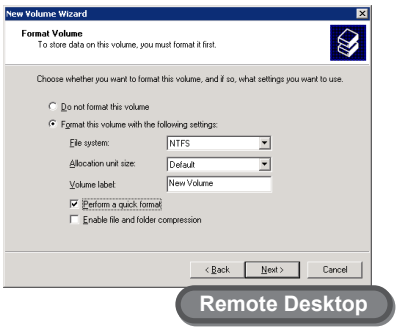
Enter the area to be secured and click on [Next].

7


New Volume Wizard
Assign Drive Letter or Path
For easier access, you can assign a drive letter or drive path to your volume.
Assign the following drive letter:
E
Mount in the following empty NTFS folder:
Browse...
Do not assign a drive letter or drive path
< Back
Next >
Cancel
Remote Desktop

Select [Assign the following drive letter] and drive letter from the pull down menu. And click [Next].

8


New Volume Wizard
Format Volume
To store data on this volume, you must format it first.
Choose whether you want to format this volume, and if so, what settings you want to use.
Do not format this volume
Format this volume with the following settings:
File system:
NTFS
Allocation unit size:
Default
Volume label:
New Volume
Perform a quick format
Enable file and folder compression
< Back
Next >
Cancel
Remote Desktop

Select [Perfect a quick format] and click [Next].

Your simple volume is complete. Turn to P25 to create a shared folder on the simple volume.

Chapter 5
Various Settings

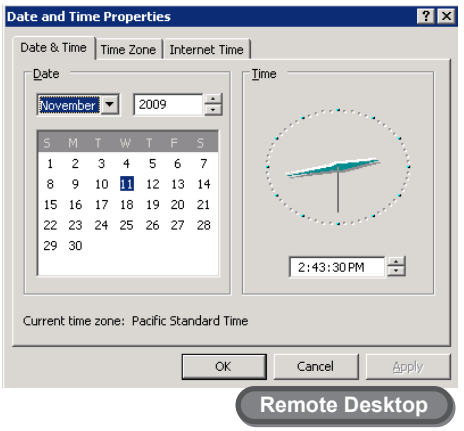
Time Settings

Synchronizing the Windows Storage Server clock.

1

Double click on the time in the systray of your remote desktop screen.

2



Select the current date, time and time zone. And click [OK].

Note: To set time automatically, click the [Internet Time] tab, then select [Automatically synchronize with Internet Time Server].

Time setup is complete.

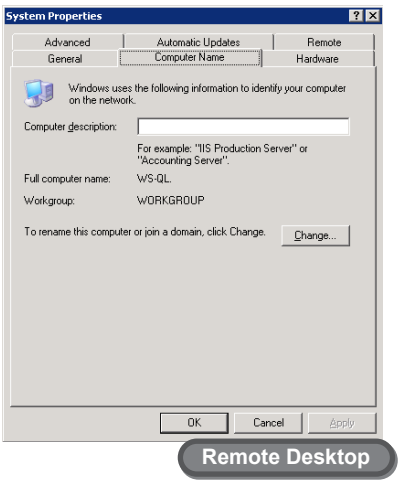
Changing the Name of the Server, Workgroup, or Domain

To change the name of the server (the TeraStation), workgroup, or domain, follow the steps below.

1

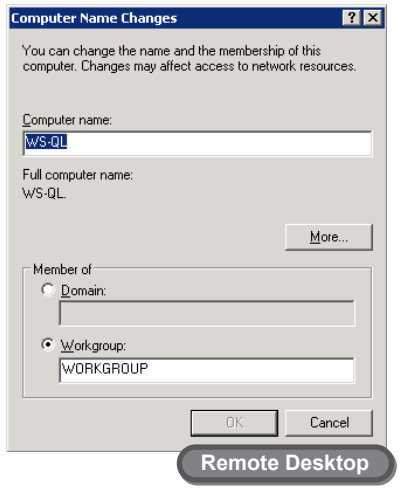
Right click on [My Computer] and select [Properties].

2



Click the [Computer Name] tab, then [Change].

3



Enter a computer name. You may also enter a domain or workgroup. Click [OK].

Note:

If more than 16 characters are entered for the computer name, only the first 16 characters are used.

You've changed the name of your TeraStation.

Changing the Administrator Password

After initial setup, you should change the TeraStation's Administrator password from the factory default of "password". Follow the steps below to change the password for an account that you are logged in to.

1 Click on [Start], then [Windows Security].

2

Click on [Change Password].

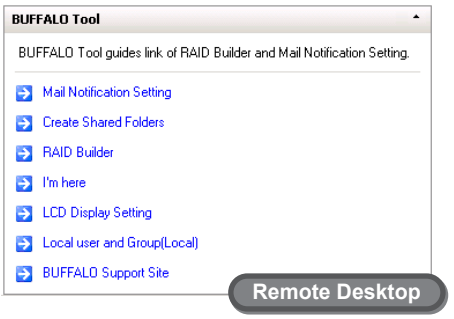
3

Enter the “password” in the [Old Password] and the desired password in the [New Password] and [Confirm New Password]. Click [OK].

This completes the password change.

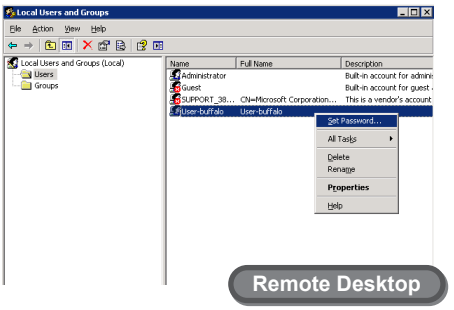
You can also change the password for an account that is not logged in:

1



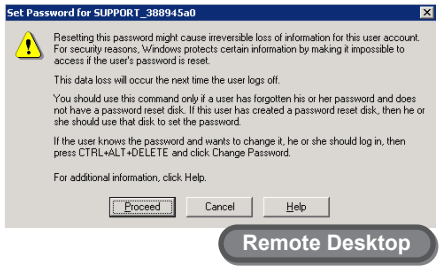
In the Buffalo Tool, click on [Local user and Group(Local)].

2



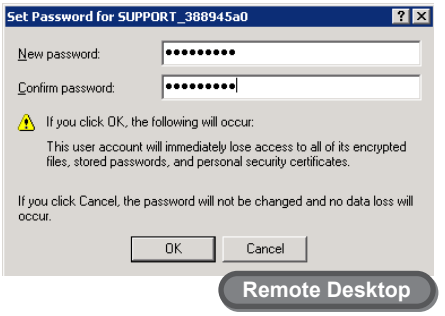
Right click on the user whose password you want to change. Choose [Set Password].

3


Set Password for SUPPORT_388945a0
Resetting this password might cause irreversible loss of information for this user account. For security reasons, Windows protects certain information by making it impossible to access if the user's password is reset.
This data loss will occur the next time the user logs off.
You should use this command only if a user has forgotten his or her password and does not have a password reset disk. If this user has created a password reset disk, then he or she should use that disk to set the password.
If the user knows the password and wants to change it, he or she should log in, then press CTRL+ALT+DELETE and click Change Password.
For additional information, click Help.
Proceed
Cancel
Help
Remote Desktop

Click [Proceed].

4


Set Password for SUPPORT_388945a0
New password:
Confirm password:
If you click OK, the following will occur:
This user account will immediately lose access to all of its encrypted files, stored passwords, and personal security certificates.
If you click Cancel, the password will not be changed and no data loss will occur.
OK
Cancel
Remote Desktop

Enter the new password twice and click [OK].

The password is now changed.

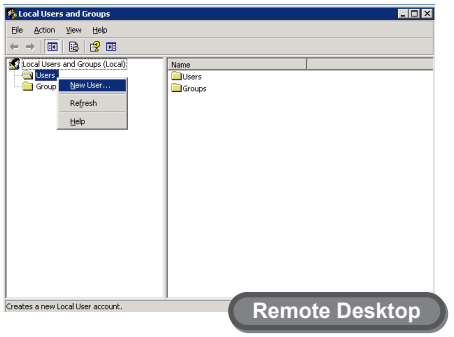
Adding a User

Add a user as given below.

1

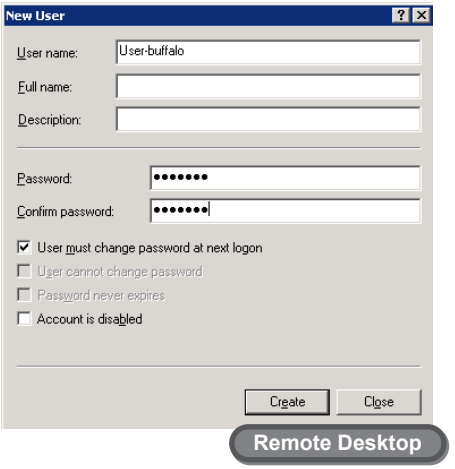
In the Buffalo Tool, click on [Local user and Group(Local)].

2



Right-click on [Users] and choose [New User].

3



Enter the user name, password, etc., and click on [Create].

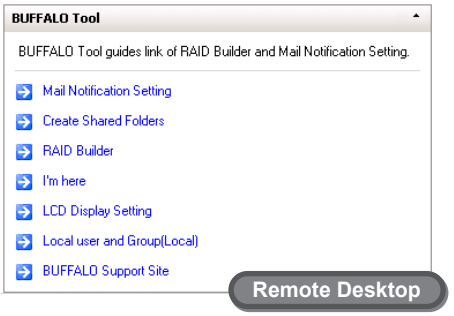
A user has now been added.

Note: Only accounts belonging to the Administrator group can log in to remote desktop.

Adding a Group

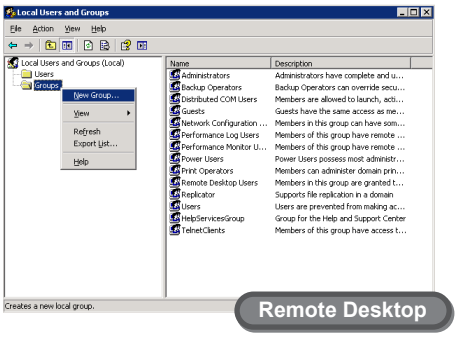
Add a Group as given below.

1



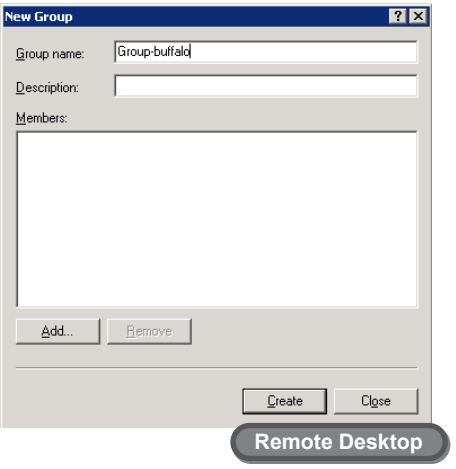
In the Buffalo Tool, click on [Local user and Group(Local)].

2



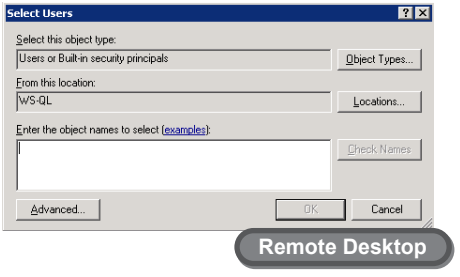
Right click on [Groups] and choose [New Group].

3



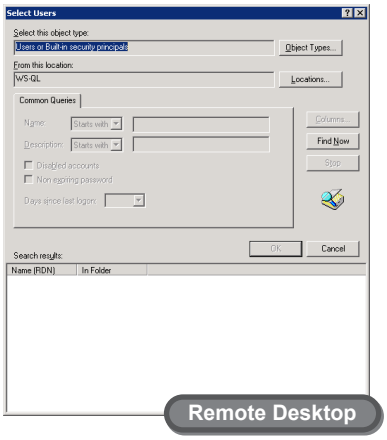
Enter the Group name and description and click [Add].

4



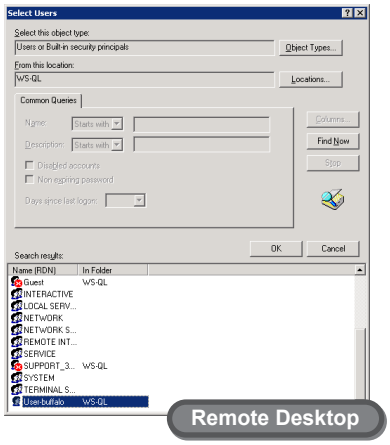
Click on [Advanced].

5



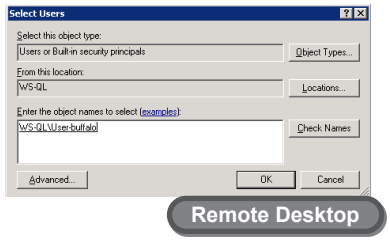
Click on [Find Now].

6



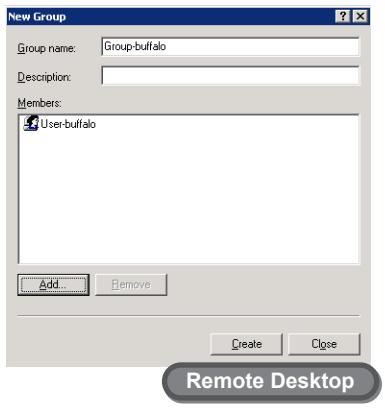
Select a user add to the group and click [OK].

7



Click [OK].

8



Click [Create].

You've added a group.

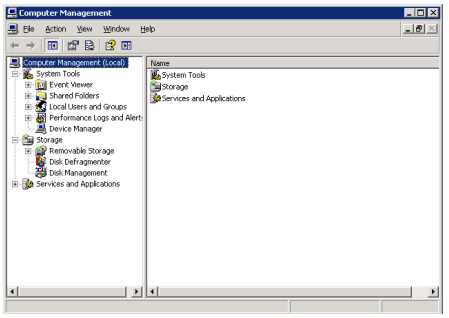
Formatting Volumes

After creating a new volume, the volume must be formatted as described below. Formatting erases all data on the volume, so back up any important data before formatting a volume.

1

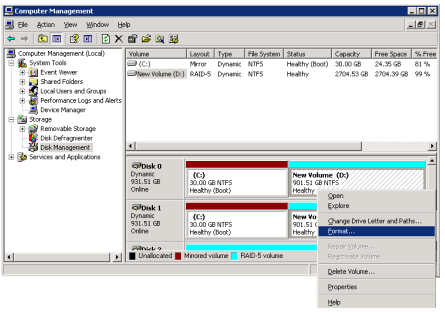
Right click on [My Computer] and select [Manage].

2



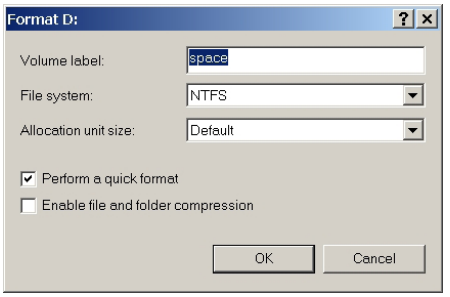
Click on [Disk Management].

3



Right-click on the volume that is to be formatted and select [Format].

4



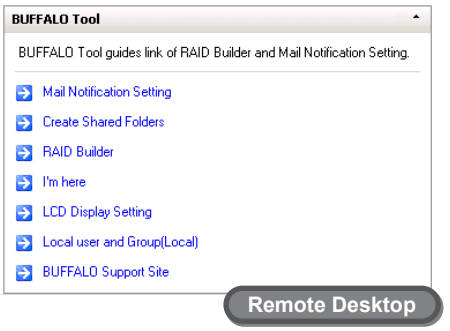
Enter a name for your volume in [Volume Lable]. Click [OK] to format the volume. This will take several minutes if you checked [Perform a quick format], or several hours if you didn't. When the format is complete, the volume will appear as "healthy" in Disk Management.

You've formatted the volume. Turn to the next page to create a shared folder on the volume.

Creating Shared Folders

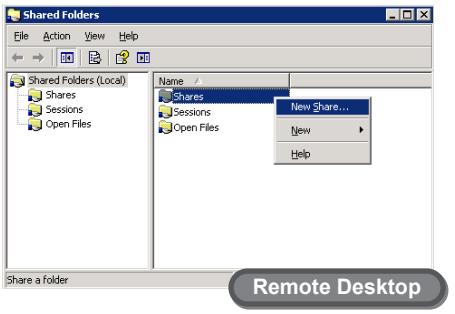
To use space on a volume, you must create a shared folder on it. Follow the steps below to create a shared folder.

1



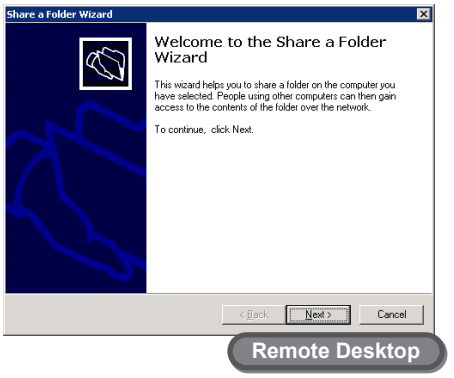
In Buffalo Tool, click on [Create Shared Folders].

2



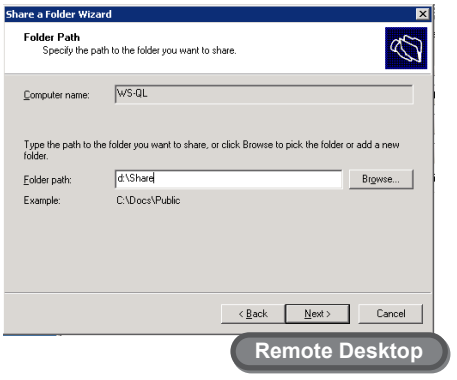
Right click on [Shares] and choose [New Share].

3


Share a Folder Wizard
Welcome to the Share a Folder Wizard
This wizard helps you to share a folder on the computer you have selected. People using other computers can then gain access to the contents of the folder over the network.
To continue, click Next.
< Back
Next >
Cancel
Remote Desktop

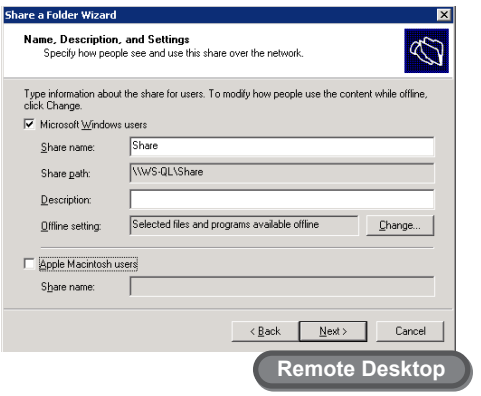
The share wizard opens. Click [Next].

4



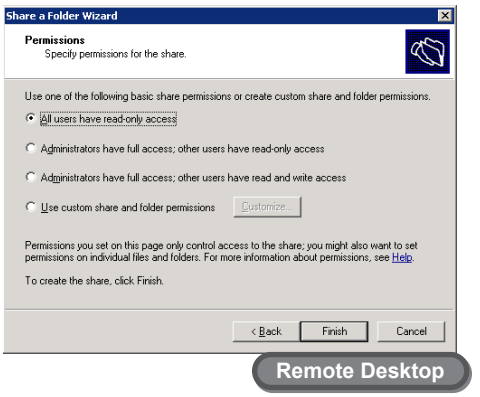
Enter a path for the share that is to be created and click [Next]. If the path doesn't exist yet, the message “The system cannot find the specified path. Do you want to create it?” will appear; click [Yes].

5


Share a Folder Wizard
Name, Description, and Settings
Specify how people see and use this share over the network.
Type information about the share for users. To modify how people use the content while offline, click Change.
Microsoft Windows users
Share name: Share
Share path: \\WS-QL\Share
Description:
Offline setting: Selected files and programs available offline
Change...
Apple Macintosh users
Share name:
< Back
Next >
Cancel
Remote Desktop

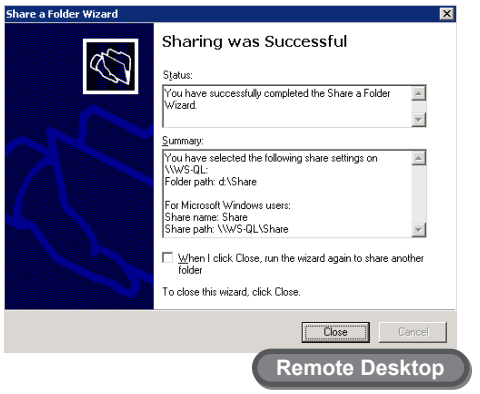
Enter a name and description for the share. Click [Next].

6


Share a Folder Wizard
Permissions
Specify permissions for the share.
Use one of the following basic share permissions or create custom share and folder permissions.
All users have read-only access
Administrators have full access; other users have read-only access
Administrators have full access; other users have read and write access
Use custom share and folder permissions
Customize...
Permissions you set on this page only control access to the share; you might also want to set permissions on individual files and folders. For more information about permissions, see Help.
To create the share, click Finish.
< Back
Finish
Cancel
Remote Desktop

Select the type of the access control of the shared folder and click [Finish].

7


Share a Folder Wizard
Sharing was Successful
Status:
You have successfully completed the Share a Folder Wizard.
Summary:
You have selected the following share settings on \\WS-QL:
Folder path: d:\Share
For Microsoft Windows users:
Share name: Share
Share path: \\WS-QL\Share
When I click Close, run the wizard again to share another folder
To close this wizard, click Close.
Close
Cancel
Remote Desktop

Click [Close].

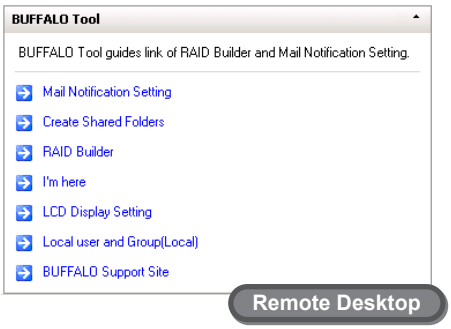
A shared folder has been created. To enable a Guest account:

1. In the Buffalo Tool, click on [Local users and groups].
2. Select [Users] under [Local Users and Groups (Local)]. Over to the right, double-click on [Guest].
3. In the [General] tab of guest properties, uncheck [Account is disabled].
4. Click [OK].

Mail Notification Setting

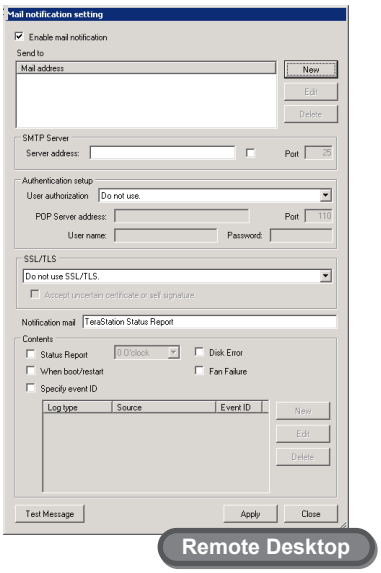
You can configure the TeraStation to email you when settings are changed or an error occurs.

1



In the Buffalo Tool, click on [Mail Notification Setting].

2



1 Check [Enable mail notification].

2 Click [New] and enter a destination email address. You may enter up to 5 addresses.

3 Enter the SMTP server address and AMTP port number.

4 Select the user authentication method (Do not use , pop before smtp, login (SMTP-AUTH), or cram-md5 (SMTP-AUTH)). Enter the user name and password. For pop before smtp, enter the POP3 server address and POP3 port number. Don't use single quotation marks (‘) in the password.

5 To use a secure connection (optional), select [Use SSL / TLS to connect to SMTP].

6 Enter a subject for notification emails in [Notification mail].

7 Select the notification content.

If [Status Report] is checked, regular email reports will be sent at the selected time.

If [Disk error] is checked, a notification will be sent anytime an error is detected in the TeraStation's hard drives.

If [When boot/restart] is checked, a notification is sent whenever the system is started or restarted.

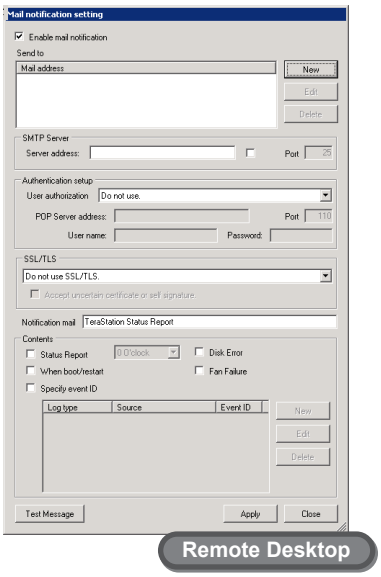
When [Fan Failure] is checked, a notification is sent if a fan malfunction is detected.

If [Specify Event ID] is checked, the log type, source, and event ID can be specified.

8 Click [Apply].

Mail notification is now configured.

The Mail notification setup screen includes the following sections:

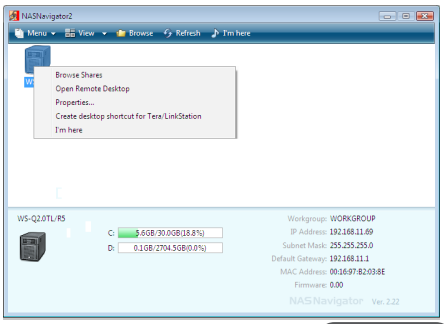


Enable mail notification	Check to enable mail notification.
Mail address	Click [New] to add an email address. Up to 5 email addresses may be entered.
SMTP server	Enter your SMTP mail server's IP address in [Server address]. Enter the SMTP port number in [Port number]. If no SMTP port number is specified, port 25 is used. If "Do not use" or "pop before smtp" is chosen for the User authentication method, port 25 is always used, even if a different port number is entered here.
User authentication method	Select the user authentication method from [POP before SMTP] [LOGIN (SMTP-AUTH) [CRAM-MD5 (SMTP-AUTH) / CRAM-MD5]]. Enter the user name and password for the mail server. If [POP before SMTP] is selected, enter the POP mail server's IP address and port number. If no port is specified, port 110 is used.
SSL / TLS	Select a SSL/TLS mode for secure transmission if using "LOGIN (SMTP-AUTH)" or "CRAM-MD5 (SMTP-AUTH/ CRAM-MD5)".
Notification mail subject	Enter a the subject line for notification emails, such as "TeraStation Status Report".
Notification contents	Select the content that is to be sent in the mail notification. If [Status Report] is checked, regular email reports will be sent at the selected time. If [Disk error] is checked, a notification will be sent anytime an error is detected in the TeraStation's hard drives. If [When boot/restart] is checked, a notification is sent whenever the system is started or restarted. When [Fan Failure] is checked, a notification is sent if a fan malfunction is detected. If [Specify Event ID] is checked, the log type, source, and event ID can be specified.
Send test mail	Sends an email notification immediately.
Apply	Applies the specified settings.
Close	Closes the mail notification settings screen.

Changing the IP Address

The TeraStation's IP address can be manually configured from NAS Navigator2 as follows:

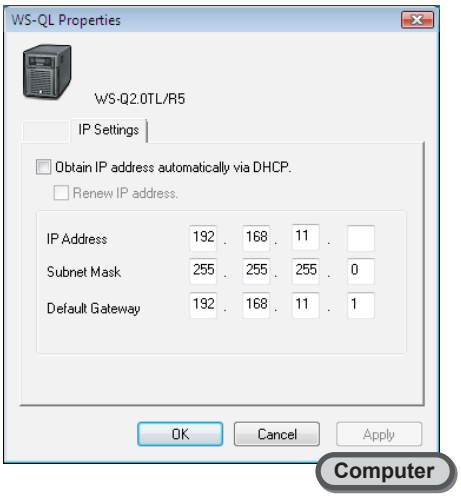
1



With a PC, right click on your TeraStation's icon and select [Properties].

With a Mac, hold down the control key and click the TeraStation icon. Select [Open device setup screen] – [IP Address].

2



1 Click the [IP address] tab.
2 Enter an IP address, subnet mask, and default gateway.

Note: Only change these settings if you know what you're doing! To have DHCP configure your IP address settings automatically, check [Obtain an IP address automatically] instead.

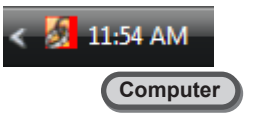
3 Click [OK]. Enter your administrator user name and password when asked.

This completes the change in IP address.

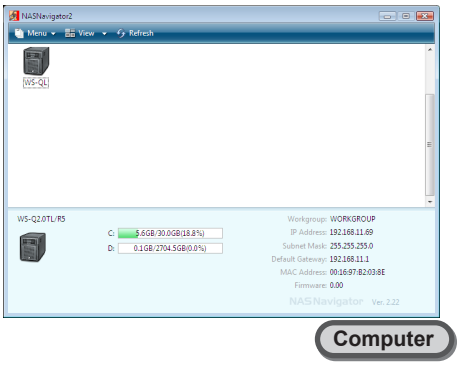
Chapter 6
NAS Navigator2

Available Menus

The NAS Navigator2 client utility lets you easily find your TeraStation(s) on the network, change IP address settings, and open remote desktop. NAS navigator2 is installed when the TeraNavigator installation program is run. It starts automatically with Windows and resides in the systray.

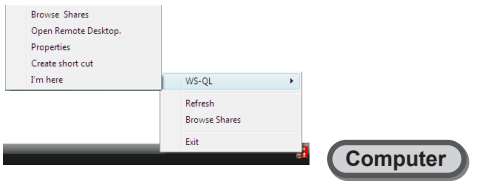


To start NAS Navigator manually, double-click on the [NAS Navigator2] icon on your desktop, or click [Start] – [Programs (All)] – [BUFFALO] – [BUFFALO NAS Navigator] – [BUFFALO NAS Navigator2]



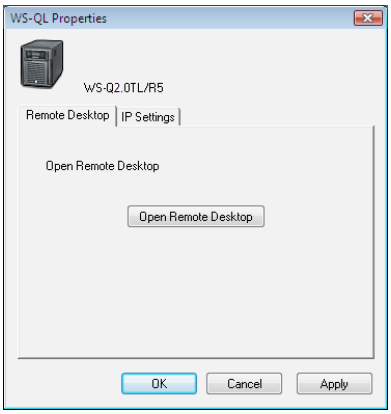
Item		Function
Menu	Allocate the network drive (*)	Not functional with this product (greyed out).
	Disconnect the network drive (*)	Not functional with this product (greyed out).
	Allocate all TeraStation / LinkStation drives	Allocates all the retrieved TeraStation shared folders to the network drive. Cannot be selected if no shared folders have been created.
	Create TeraStation / LinkStation shortcut (*)	Creates shortcut icon on the desktop when shared folders have been created in TeraStation.
	Reside at all times	Places the NAS Navigator2 in the task tray when the OS boots.
	Notify error information	Displays error messages from NAS Navigator2 in the task tray whenever errors occur.
	Use default browser	Not functional with this product (greyed out).
	Link folders	Specifies settings for linking and displaying shared folders from the TeraStation and folders on the local drive.
	Synchronize folders	Specifies settings for synchronizing and displaying shared folders from the TeraStation and folders on the local drive.
	Properties (*)	Opens the Properties screen of the selected TeraStation.
	Close	Closes NAS Navigator2.
Display	Display mode	[Icon]: Displays icons only. [Details]: Displays the name, product name, workgroup, IP address, subnet mask, and default gateway.
	Order of arrangement	Selects the display order from the following when multiple TeraStations are found. IP address, host name, product name, work group, subnet mask and default gateway.
Open (*)		Opens the shared folder of the TeraStation.
Update		Refreshes the display.
Link folders		Specifies settings for linking and displaying shared folders on the TeraStation and folders on the local drive.
Synchronize folders		Specifies settings for synchronizing and displaying shared folders from the TeraStation and folders on the local drive.
I'm here		Click to open, then click [OK] to cause the selected TeraStation to beep. This can be useful for managing multiple TeraStations.

Right-click on the NAS Navigator2 icon in the systray for the following options:



Item		Function
TeraStation name	Open shared folder	Opens the TeraStation's shared folder.
	Open remote desktop	Opens the TeraStation's Windows desktop in a remote desktop session.
	Properties	Opens the TeraStation's properties.
	Create shortcut	Makes a shortcut to the TeraStation's default shared folder on your desktop.
	I'm here	Causes the TeraStation to beep. This works with most Buffalo TeraStations and LinkStation. However, some models are not supported.
Refresh		Refreshes the list of available TeraStations.
Window display		Opens NAS Navigator2.
Link folders		Specifies settings for linking and displaying shared folders on the TeraStation and folders on the local drive.
Synchronize folders		Specifies settings for synchronizing and displaying shared folders on the TeraStation and folders on the local drive.
Exit		Closes NAS Navigator2.

The following operations can be executed from the TeraStation's Properties screen.



Computer

Menu item	Function
Remote desktop	Opens the TeraStation's Windows desktop in a remote desktop session.
IP address	Accesses the IP address settings page. By default, the TerStation is configured to get an IP address automatically from a DHCP server. Alternately, you may set the TeraStation's IP address settings manually (advanced users only).

Appendix

Factory Settings

By default, the TeraStation is configured with the following settings out of the box:

• Administrator accout name: Administrator

• Administrator password: password

• Shared folders: not configured

• DHCP: enabled

If no DHCP server is available, the following settings are used:

IP address: 169.254.xxx.xxx (where each xxx is an arbitrary number between 1 and 255)

Subnet mask: 255.255.0.0

• Registered groups: None

• Microsoft network group: WORKGROUP

• RAID volumes:

C drive: 30GB mirrored accross drives 1 and 2 (operating system resides here)

D drive: remaining space in RAID 5 array across drives 1, 2, 3 and 4 (user storage space)

• unallocated 30 GB space on drives 3 & 4

The following group policies are set by default:

- [Prohibit TCP/IP Advance Configuration] is enabled.
- [Prohibit detection of Remote Access Connections] is enabled.
- [Ability Enable/Disable a LAN connection] is disabled.
- [Enable Windows 2000 Network Connections Settings for Administrators] is enabled.

Liquid Crystal Display

The main LCD display on the front of the TeraStation displays the following information:

Normal Operation

Normally, the following information is displayed. Press the [Display] button to cycle through the different information available. Displayed items can be changed from within the Buffalo Tool in [LCD Display Settings].

Display		Meaning
LINK SPEED	LINK SPEED No LINK	Not connected to the network.
	LINK SPEED 10 Mbps	Connected at 10 Mbps.
	LINK SPEED 100 Mbps	Connected at 100 Mbps.
	LINK SPEED 1000 Mbps	Connected at 1000 Mbps full duplex connection.
Disk space	HDD USED C_D_E_F_	Displays the used space in areas C, D, E and F of the hard disk as bar graphs. "^" is displayed for drives that are full.
HOST name / IP address	WS – QLxxx 192.168.11.150	Displays the HOST name and IP address.
Calendar date	DATE TIME 2009/09/17 11:11	Displays the date and time
Installed OS	Windows Storage Server 2003 R2	Displays the TeraStation's installed OS.
HDD temperature	D1: --°C D2: --°C D3: --°C D4: --°C	Displays the temperature of each hard disk in the TeraStation.

Errors and Warnings

The following messages are displayed if a fan or cooling failure is detected, or if a hard drive is not found.

Display	Meaning
SYSTEM Error E11 Fan Failure	The fan is not rotating at the correct speed. Check the fan! Is something stuck in it? Use an air duster to clean dust and dirt from the fan. If the error is still displayed, contact technical support.
SYSTEM Error E12 Cooling Failure	The TeraStation is too hot. Do not keep anything close to the TeraStation, it needs room for proper airflow. Move it to a cooler place if necessary.
HDx Error E16 HDx Not Found	Drive x is not detected. Drive x is ether disconnected or malfunctioning. Check drive x and replace if necessary.